CLAIMS:

1.   A honeycomb carrier for an exhaust gas-cleaning
catalyst which is a honeycomb carrier to support a
catalyst to clean an exhaust gas, characterized in that
5   the material for the honeycomb carrier is an aluminum
magnesium titanate sintered product obtained by firing at
from 1,000 to 1,700°C a mixture comprising 100 parts by
mass, as calculated as oxides, of a mixture comprising a
Mg-containing compound, an Al-containing compound and a
10   Ti-containing compound in the same metal component ratio
as the metal component ratio of Mg, Al and Ti in an
aluminum magnesium titanate represented by the empirical
formula $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$ (wherein $0<x<1$), and from 1 to
10 parts by mass of an alkali feldspar represented by the
15   empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$).

2.   A honeycomb carrier for an exhaust gas-cleaning
catalyst which is a honeycomb carrier to support a
catalyst to clean an exhaust gas, characterized in that
the material for the honeycomb carrier is an aluminum
20   titanate sintered product obtained by firing at from
1,250 to 1,700°C a raw material mixture comprising 100
parts by mass of a mixture (hereinafter referred to as
component X) comprising TiO_2 and Al_2O_3 in a molar ratio of
the former/the latter being 40 to 60/60 to 40, and from 1
25   to 10 parts by mass of an alkali feldspar represented by
the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$), an
oxide of a spinel structure containing Mg, or MgO or a

Mg-containing compound which can be converted to MgO by firing (hereinafter referred to as component Y).

3. The honeycomb carrier for an exhaust gas-cleaning catalyst according to Claim 2, wherein the component Y is a mixture comprising an alkali feldspar represented by $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0 \leq y \leq 1$), and an oxide of a spinel structure containing Mg and/or MgO or a Mg-containing compound which can be converted to MgO by firing.

4. The honeycomb carrier for an exhaust gas-cleaning catalyst according to any one of Claims 1 to 3, which has a wall thickness of from 0.05 to 0.6 mm, a cell density of from 15 to 124 cells/cm^2, a porosity of the partition wall of from 20 to 50%, and a thermal expansion coefficient of at most $3.0 \times 10^{-6} K^{-1}$.

5. The honeycomb carrier for an exhaust gas-cleaning catalyst according to any one of Claims 1 to 4, wherein the catalyst contains an alkali metal or alkaline earth metal component to remove NOx in the exhaust gas.

6. The honeycomb carrier for an exhaust gas-cleaning catalyst according to any one of Claims 1 to 5, wherein the exhaust gas is an exhaust gas of an automobile of a system wherein a fuel is directly jetted into an engine or of a system wherein a fuel is diluted and burned.

7. A process for producing a honeycomb carrier for an exhaust gas-cleaning catalyst, characterized by preparing a raw material mixture comprising 100 parts by mass, as calculated as oxides, of a mixture comprising a Mg-

containing compound, an Al-containing compound and a Ti-
containing compound in the same metal component ratio as
the metal component ratio of Mg, Al and Ti in an aluminum
magnesium titanate represented by the empirical formula

5    $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$ (wherein $0<x<1$), and from 1 to 10 parts
by mass of an alkali feldspar represented by the
empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0 \leqq y \leqq 1$), adding
a molding assistant to the raw material mixture, followed
by kneading to plasticize the raw material mixture to

10   make it extrusion-processable, and then extrusion
processing it into a honeycomb body, followed by firing
at from 1,000 to 1,700°C.

8.   A process for producing a honeycomb carrier for an
exhaust gas-cleaning catalyst, characterized by preparing

15   a mixture comprising 100 parts by mass of a mixture
(hereinafter referred to as component X) comprising TiO_2
and Al_2O_3 in a molar ratio of the former/the latter being
40 to 60/60 to 40, and from 1 to 10 parts by mass of an
alkali feldspar represented by the empirical formula

20    $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0 \leqq y \leqq 1$), an oxide of a spinel
structure containing Mg, or MgO or a Mg-containing
compound which can be converted to MgO by firing
(hereinafter referred to as component Y), adding a
molding assistant to the mixture, followed by kneading to

25   plasticize the mixture to make it extrusion-processable,
and extrusion processing it into a honeycomb body,
followed by firing at from 1,250 to 1,700°C.

9. The process for producing a honeycomb carrier for an exhaust gas-cleaning catalyst according to Claim 7 or 8, wherein the average particle size of each component contained in the raw material mixture is at most 10 µm.

5 10. A method for cleaning an exhaust gas, which comprises contacting the exhaust gas to a honeycomb carrier supporting a catalyst to clean an exhaust gas, characterized in that the material for the honeycomb carrier is an aluminum magnesium titanate sintered

10 product obtained by firing at from 1,000 to 1,700°C a mixture comprising 100 parts by mass, as calculated as oxides, of a mixture comprising a Mg-containing compound, an Al-containing compound and a Ti-containing compound in the same metal component ratio as the metal component

15 ratio of Mg, Al and Ti in an aluminum magnesium titanate represented by the empirical formula $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$ (wherein $0<x<1$), and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$).

20 11. A method for cleaning an exhaust gas, which comprises contacting the exhaust gas to a honeycomb carrier supporting a catalyst to clean an exhaust gas, characterized in that the material for the honeycomb carrier is an aluminum titanate sintered product obtained

25 by firing at from 1,250 to 1,700°C a raw material mixture comprising 100 parts by mass of a mixture (hereinafter referred to as component X) comprising TiO_2 and Al_2O_3 in a

molar ratio of the former/the latter being 40 to 60/60 to

40, and from 1 to 10 parts by mass of an alkali feldspar

represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$

(wherein $0 \leq y \leq 1$), an oxide of a spinel structure

5 containing Mg, or MgO or a Mg-containing compound which

can be converted to MgO by firing (hereinafter referred

to as component Y).